10. Implementation

10.1 Action plan with short and long-term goals.

An Action Plan matrix has been designed and developed by the IM Governance Committee (IMGC) identifying both short and long term goals to be achieved for the Interoperability Montana (IM) Project Plan. Also see Section 1.7 for Scope and Timeframe of the Plan

The short term goals have been identified to be achieved within a one year timeframe and include:
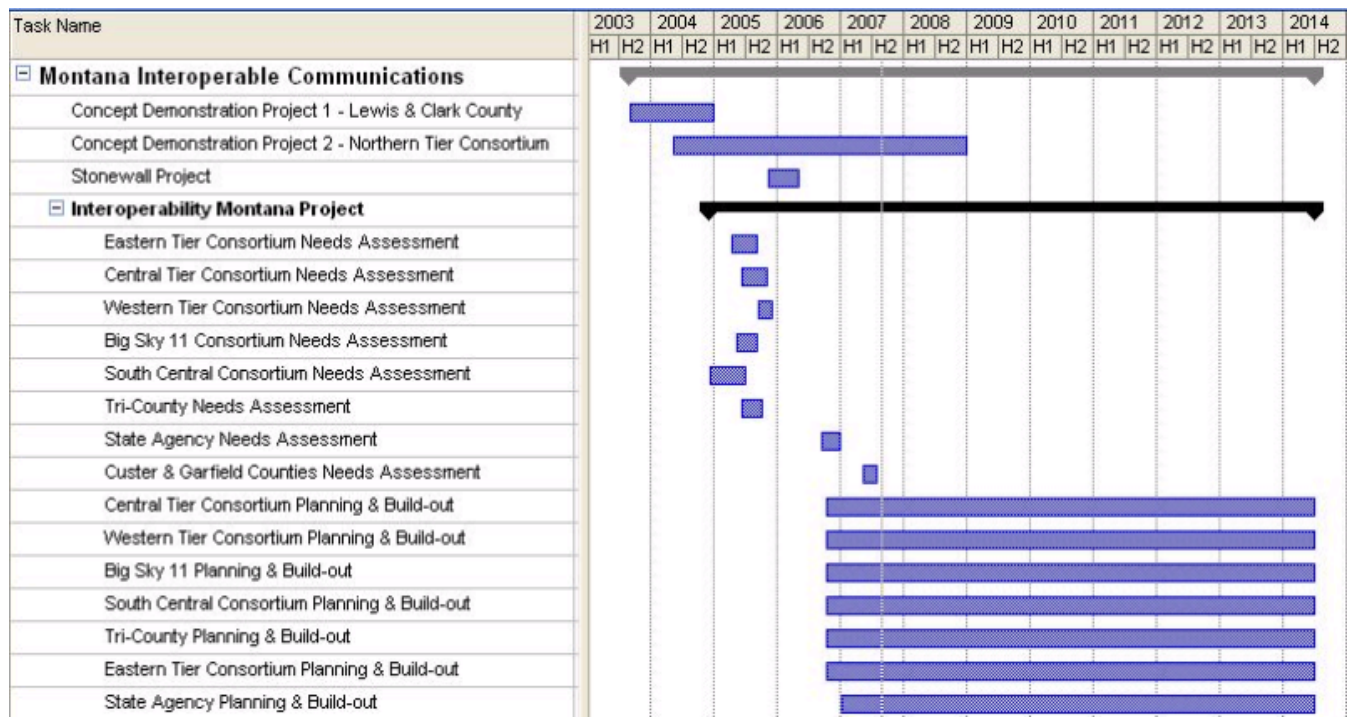
1. Define and Formalize Organizational Structure
2. Identify, Establish and Maintain Key Relationships
3. Identify and Secure Funding Streams for Interoperability Montana Project

The long term goals as laid out in this plan beyond two years include:

1. Develop Consistent Outreach Strategies
2. Project Sustainability Strategy & Planning
3. Needs Assessments and Maintenance Costs
4. Complete Frequency Plan
5. Schedule Plan of Replacement
6. Build-out and Expansion of the System
7. Targeted and Timely Training Plans
8. Project Management of the System

Figure 16, next page, illustrates a mechanism that is being used to track accomplishments of goals and objectives.

Figure 16: Project Management Tracking

Task Name	2003		2004		2005		2006		2007		2008		2009		2010		2011		2012		2013		2014	
	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2
⊟ Montana Interoperable Communications																								
Concept Demonstration Project 1 - Lewis & Clark County																								
Concept Demonstration Project 2 - Northern Tier Consortium																								
Stonewall Project																								
⊟ Interoperability Montana Project																								
Eastern Tier Consortium Needs Assessment																								
Central Tier Consortium Needs Assessment																								
Western Tier Consortium Needs Assessment																								
Big Sky 11 Consortium Needs Assessment																								
South Central Consortium Needs Assessment																								
Tri-County Needs Assessment																								
State Agency Needs Assessment																								
Custer & Garfield Counties Needs Assessment																								
Central Tier Consortium Planning & Build-out																								
Western Tier Consortium Planning & Build-out																								
Big Sky 11 Planning & Build-out																								
South Central Consortium Planning & Build-out																								
Tri-County Planning & Build-out																								
Eastern Tier Consortium Planning & Build-out																								
State Agency Planning & Build-out																								

10.2 Performance measures that will allow policy makers to track the progress and success of initiatives.

The IM Project Management constantly monitor and track the progress of the various phases of the project. The metrics used on the Northern Tier Interoperability Project are provided here as an example of how progress is being tracked everywhere.

In general, the build-out and progress of these radio projects is divided into the following high-level activities:

1. Organization of consortia or agency groups, formed to initiate and direct the creation of a P25, trunked, interoperable communications system within each consortium's jurisdictional boundaries. This step has already occurred for all the counties and Indian Nations in the State of Montana.

2. Working with technical consultants, each consortium or agency determines what their current state of affairs is with respect to communications, whether interoperable or not. This current state of affairs is documented and includes an inventory of existing equipment and a list of relevant stakeholders.

3. Working with technical consultants, each consortium or agency determines where they believe their entity needs to go with respect to future interoperable capabilities. This is coordinated with the existing standards and guidelines created by those entities that have previously been through the process (Lewis & Clark County and the Northern Tier).

4. Working through the Interoperability Montana Technical Committee (IMTC), plans for new and upgraded radio sites are approved, along with determining the funding source for the work.

5. Once approved, Statements of Work are written up, and a procurement process begun, ultimately ending with contract awards for the actual work to build or upgrade the sites.

6. Working with the successful vendors, project management, the IMTC, and the local representatives coordinate the build-out and deployment of equipments. This includes the acquisition of frequencies, if necessary, for both the microwave and VHF trunking equipment.

7. Step 6 continues until the completion of construction and User Acceptance Testing.

8. During the above process, work is also begun to locate potential funding sources for subscriber units. Local entities are primarily responsible for this step at this time.

The Northern Tier Interoperability Project uses the following metrics to track progress on its radio sites:

Table 3: Preliminary & Setup Work

Task	Percent of Total
Approval To Proceed with This Site	2
Obtain Preliminary Trunking Frequencies	5
Conduct Current Site Survey	10
Create & Distribute Current Site Survey & Site Plot	2
Submit NEPA Checklist	2
Receive Approved NEPA Checklist	10
Submit Required FAA Forms	1
Create & Distribute Updated (New) Site Plot	2
Obtain Signed Site Lease Agreement	35
Obtain Signed Site Use Agreement	20
Send Site Pre-Award Letter	1
Receive Signed Site Pre-Award Letter	10
Total	**100**

Table 4: Civil Construction of Infrastructure (Tower, Shelter, and Generator)

Task	Percent of Total
Create Site Infrastructure SOW	3
Issue Site Infrastructure RFP	1
Award Site Infrastructure Contract	2
Conduct Soil Survey and Deliver Report	1
File Building Permit(s)	1
Identify Tower Loading Requirements	1
Obtain Tech Team Approval of Tower Specs	1
Submit Tower Specs to Manufacturer	1
Prepare Final Tower Design & Drawings	3
Distribute Tower Design Diagram(s)	1
Order Tower (Including lead time)	10
Perform Tower Foundation Construction	3
Perform Tower Foundation Inspection	1
Pour Tower Foundation & Cure	5
Deliver Tower To Site	1

Install Tower	10
Create & Distribute Preliminary Shelter Blueprints	1
Create & Distribute Final (PE) Shelter Blueprints	3
Order Shelter (Including lead time)	10
Pour Shelter Slab & Cure	3
Deliver Shelter To Site	1
Install Shelter	10
Acquire Electrical Permit	1
Order Electrical Work	3
Bring Electrical Power To Compound	1
Bring Electrical Power Into Shelter	1
Order Generator (Including lead time)	3
Pour/Place Generator Slab	1
Deliver Generator & Propane Tank to Site	1
Acquire Mechanical Permit	1
Install Generator & Propane Tank & Initialize	5
Deliver Fence to Site	1
Install Fence	5
Conduct Initial Infrastructure Walkthrough	1
Obtain Initial Infrastructure Walkthrough Approval	3
Total	**100**

Table 5: Microwave Hop Construction and Installation

Task	Percent of Total
Conduct Computer Path Survey(s)	1
Create Site Microwave SOW	5
Issue Site Microwave RFP	3
Award Site Microwave Contract	5
Conduct Field Path Survey(s)	1
Identify Microwave Frequencies	5
Design MW System	10
Create & Ship MW Radio Equipment	10
Order & Ship OEM Equipment	10
Create & Ship MW Antenna System	10
Deliver Equipment To Sites (Dishes, ODUs, Radios)	10
Install Hop To Sites (Hang dishes & install equipment)	20
Hop Path Testing	10
Total	**100**

Table 4: Trunking Construction and Installation

Task	Percent of Total
Create Site Trunking SOW	3
Issue Site Trunking RFP	1
Award Site Trunking Contract	1
Identify Trunking Frequencies	5
Submit Trunking Frequencies to FCC For Approval	1
Receive Frequency Response from FCC	5

Identify Trunking Frequencies Again	1
Submit Trunking Frequencies to FCC for Approval Again	1
Receive Frequency Approval from FCC	15
Spectrum Fingerprinting by Trunking Vendor	1
Analyze High-level Carrier Report	1
Submit to Trunking Vendor for Approval	1
Receive Frequency Response from Trunking Vendor	5
Analyze High-level Carrier Report Again	1
Submit to Trunking Vendor for Approval Again	1
Receive Frequency Approval from Trunking Vendor	10
Create & Ship VHF Trunking Equipment	5
Design Combining Equipment	10
Create & Ship Combining Equipment	5
Create & Ship Antenna System	5
Deliver Trunking Equipment to Site	1
Hang Antenna & Install Trunking Equipment	15
Site Trunking UAT	5
Site Becomes Operational	1
Total	**100**

Progress on the project is tracked weekly, with project management addressing issues as they arise. Monthly meetings with the IMPD are conducted, with escalated issues discussed and addressed.

10.3 Plan for educating policy makers and practitioners on interoperability goals and initiatives.

A Marketing Plan and Public Information Campaign for Interoperability Montana (IM) is being developed by the established Marketing/Outreach subcommittee of the IM Governance Committee. As part of this plan and campaign information, products, targeted audiences and means to communicate are being designed.

Some activities and products have already been initiated by this group that includes:

- Development of a Fact Sheet describing an Overview of Interoperability Montana Project, its structure and demonstration projects across the state. This Fact Sheet is used in presentations to various policy-makers and local and state elected officials

- *Heard Across Montana* (HAM) a weekly electronic newsletter produced by the Public Safety Service Bureau (PSSB) for weekly updates of IM Project activities, committee reports and a calendar of committee and consortium meetings.

- A comprehensive website has been developed for the IM Project, the IMPD, the IMGC, IMTC and all consortia. It is updated regularly and contains copies of all meetings, minutes and agendas. http://interop.mt.gov

- A live demonstration of interoperable radio communications was displayed for state legislators doing the 2007 legislative session
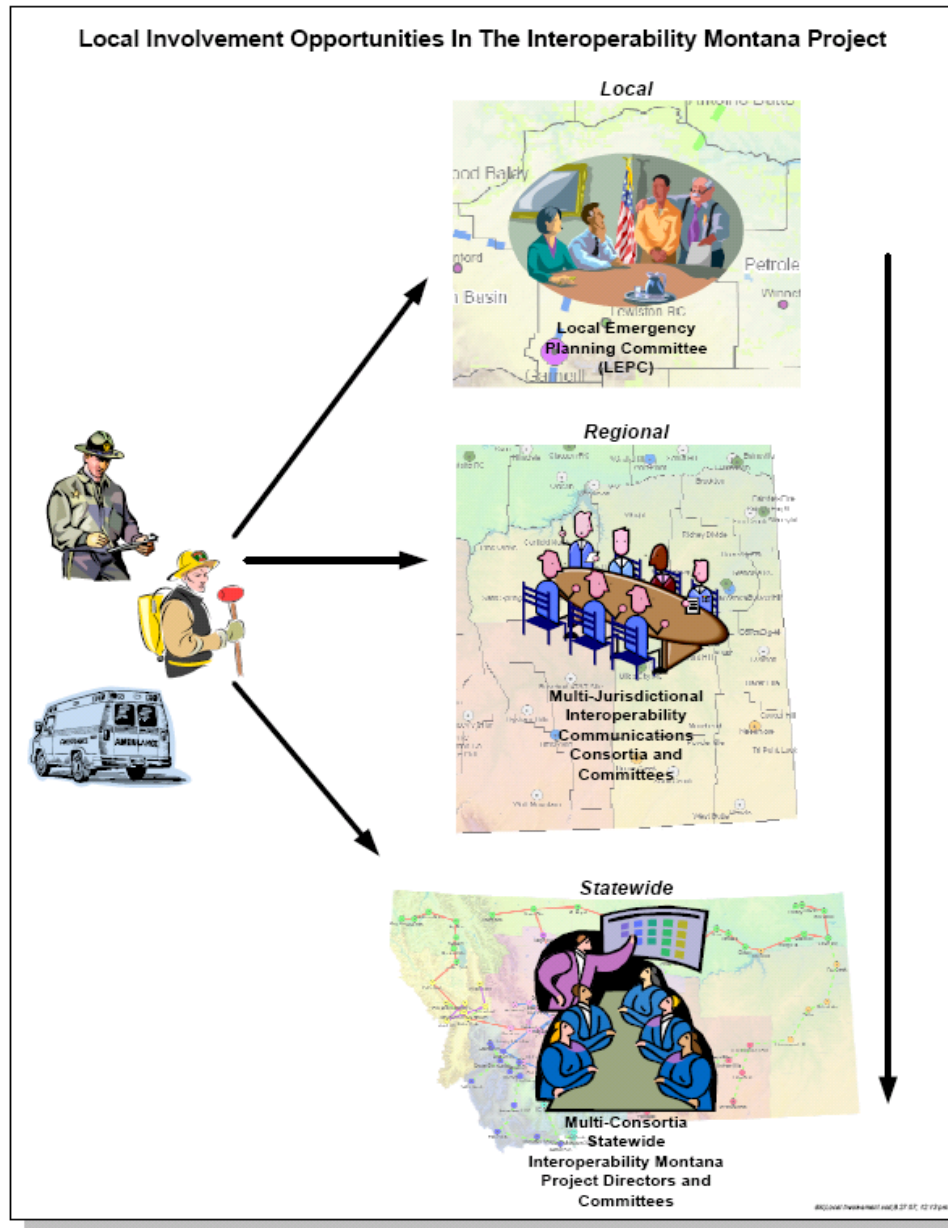
- Testimony was presented at the 2007 legislative session by various IM Project Directors, local responders and state officials to encourage funding for the Interoperability Montana Project. The legislature later authorized $8 million for the IM Project..

- Outreach efforts have been made to local County Commissioners through formal presentation by members of the IMGC. These presentations highlighted the need for statewide Interoperability system and the partnerships for sharing of cost by local, state and federal governments. These presentations were made across the state to the Montana Association of County Officials (MACo) at scheduled District meetings held in June '07. A PowerPoint presentation and materials were developed including handouts of summaries of activities and accomplishment of IM to date.

- An issue of the *Montana Policy Review* (MPR) a publication prepared by the Montana State University Local Government Center was developed exclusively around the issue of Interoperability Montana. This publication was distributed to more than 400 policy-makers and government officials across the state; that including all 56 County Commissions, 129 Mayors, 12 City Managers, 56 County DES Coordinators, Volunteer and Rural Fire Chiefs, Chiefs of Police and Sheriffs, 150 State Legislators, State Executive Officers and Montana's U.S. Congressional delegation and district offices.

Please see Appendix N for hyperlinks to the IM Project Fact Sheet; Heard Across Montana (HAM) newsletter and Montana Policy Review (MPR).

10.4 Roles and opportunities for involvement of all agencies in the implementation of the statewide plan.

Figure 17: Local Involvement Opportunities in the Interoperability Montana Project

Local Involvement Opportunities In The Interoperability Montana Project

Local

Local Emergency Planning Committee (LEPC)

Regional

Multi-Jurisdictional Interoperability Communications Consortia and Committees

Statewide

Multi-Consortia Statewide Interoperability Montana Project Directors and Committees

Local stakeholders (sheriff, police, fire, EMS, etc.) have the opportunity in Montana to fully participate and influence the statewide plan. As mentioned previously, this process began as a grassroots effort, with locals driving the process from the beginning. The basic local unit is the Local Emergency Planning Committee (LEPC) or the Tribal Emergency Response Committee (TERC). The LEPCs and TERCs have been in place and functioning for many years, since the enactment of Superfund Amendments Reauthorization Act (SARA) III, and have a history of helping diverse local agencies cooperate and interoperate.

Montana's counties and Indian Nations have banded together in eight regional interoperability consortia. Please *Section 1.2* for a list of consortia and their members. Representatives of local jurisdictions have the opportunity to participate as members of the consortia. The consortia meet individually and plan the goals and details of their region. The emphasis is on ensuring that needs are met with respect to interoperable communications. Although various state and/or federal agencies are invited and often attend these regional consortia meetings, they are not generally members at this level.

At the state level, the Interoperability Montana Project Directors board is made up of representatives from the seven regional consortia and the Mobile Data Terminal consortium, as well as, representatives from three heavily-involved state agencies, such as Montana Department of Natural Resources, Montana Department of Transportation and the Montana Highway Patrol.

A local person who wishes to participate actively in the Montana interoperable communications effort has opportunities at the local, regional, and state level, ensuring that Montana's effort remains driven by, and supported by the needs of local agencies, while not excluding the state agencies.

All monetary decisions to be made for the IM project are ultimately determined by elected officials within their jurisdictions including but not limited to:

- Purchase of subscriber units
- Acceptance and upgrades to infrastructure (towers, shelters, generators, etc.)
- Letters Of Concurrence (LOCs) for use of local frequencies throughout the statewide build out
- Budgeting for on-going maintenance
- User Fees

10.5 Plan for Identify, develop and oversee operational requirements, SOPs, training, technical solutions, and short- and long-term funding sources.

Previous referenced Sections of this SCIP address the plans, means and methods for achieving the operational, technical, training and funding requirements of the Statewide Communication Interoperability Plan (SCIP). As listed below.

Section 5.2 addresses the Needs Assessment that were conducted in each consortium to develop technical solutions to emergency communication networks, as well as a IM Project Migration Plan for communication technology.

Section 6.2 addresses the use of the NIMS complaint Montana Mutual Aid and Common Frequencies Handbook for standard operating procedures of Montana's public safety radio communication program.

Section 7.1 addresses the development of a Training Plan and program to be utilized. The implementation and use of these training plans will be through the consortia and local public safety and emergency providers.

Section 9.2 addresses in detail the funding strategies for both short and long term funding sources. These would involve developing and securing partnerships and levels of contribution by various identified sources.

10.6 POC responsible for implementing the plan.

The IM Project is currently addressing its staffing needs through its committee process and a single Point of Contact (POC) has yet to be indentified. Currently, the executive officer and management team is being defined by the IM Governance Committee and it will make a recommendation to the IM Project Directors (IMPD) in the near future. The roles and responsibilities will be defined as a result of this process for a POC as will all other staffing needs.

10.7 Critical success factors for implementation of the plan.

The diagram below describes the **Radio System Deployment Strategy** for milestones or steps to be accomplished.

Figure 18: Radio System Deployment Strategy
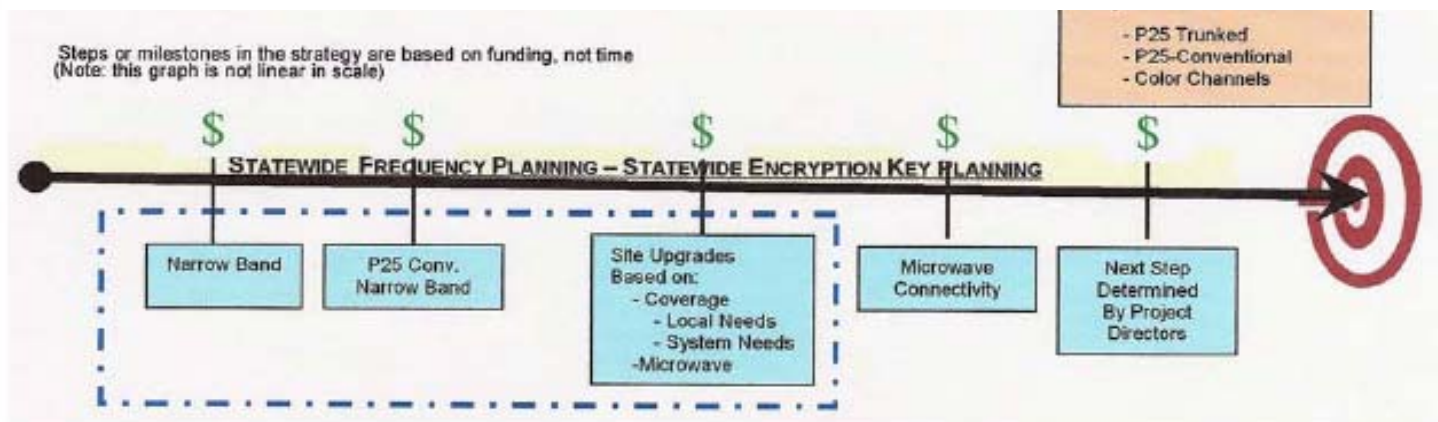
GOAL: Consortia reach milestones together

Centralized Project Management – Frequency Planning, Encryption Key Planning

Coordination – Collaboration – Funding – Governance

Prioritization of Steps: Local need is first priority (within the definition of statewide interoperability established by the SIEC)

Business Practice Review and Training

As described in the various sections of the Statewide Communication Interoperability Plan (SCIP), Interoperability Montana has initiated processes, organizations and projects that form the basis for building interoperability policies and plans. Critical success factors for the implementation of the plan address the above-mentioned needs below.

- **Clearly state objectives for Interoperability Montana (IM)**

    o Montana has an established definition of interoperability that was adopted by the Statewide Interoperability Executive Council (SIEC) and the Interoperability Montana Project Directors (IMPD). This definition and the state's technical specifications form the foundation for future development. Long-term strategies and objectives beyond current projects are being presently established and will be communicated.

- **Finalize a permanent governance structure.**

    o Montana's grass-root approach has facilitated local leadership of the interoperability process with selected participation by local, state, tribal and partners. The eight voice and one mobile data consortium are led by local public safety officials. The Directors of those consortia are represented on the IMPD Board. The Board represents the present foundation for interoperability leadership and governance in Montana. This would include the final development of the Interlocal government agreements signed by each consortium, the completion of the Memorandum of Understanding signed by the IMPD members and securing a permanent Executive staffing position for the IM Project.

- **Continue to identify and define other Federal, State, local agencies and non-government organizations to participation in Montana's Interoperability process**

    o Several State of Montana agencies that utilize wireless communication are participating in the process. It is Montana's intention to identify the degree of interoperable use of future agency systems and define elements of participation.

- **Identify financing for project sustainability.**

    o In the process of defining governance and use, it is critical to identify and establish sustained funding sources to support interoperability in Montana.

- **Develop a platform for Standard Operating Procedures and Training and Exercise modeling**

    o Processes, procedures and recommendations developed through this Plan will form the foundation for the IMPD Board to establish statewide policies on interoperability and future system utilization. This foundation will serve as a boilerplate for local, tribal and regional consortia groups to develop training and exercises and standard operating procedures. Governance modeling will include approaches for asset tracking and system oversight.

- **Develop strategy to communicate the plan**

    o A public information and marketing plan will continue to be established to provide education and outreach to policy makers across for their continued support of interoperability. Using new technology, develop the strategy and resources to distribute the relevant information with web-based tools and services, and distributing information booklets